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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/810,189

03/26/2004

Mark Grayson

062891.1216

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5073

7590

09/28/2006

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DALLAS, TX 75201-2980

EXAMINER

LY, ANH VU H

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/810,189	Applicant(s) GRAYSON ET AL.	
	Examiner Anh-Vu H. Ly	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This communication is in response to applicant's amendment filed July 17, 2006. Claims 1-44 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-9, 11-14, and 16-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toth et al (US Pub 2005/0053068 A1) in view of Maes (US Pub 2004/0266388 A1). Hereinafter, referred to as Toth and Maes.

With respect to claims 1, 6, 11, 28, 33, 38, 43, and 44, Toth discloses a method for providing a multicast service (Fig. 1), comprising:

maintaining multicast service information at an application server (Fig. 1, GGSN1 which including memory and processors for storing and processing), the multicast service information describing a multicast service having an associated subscriber (Fig. 1, MCS multicasting data to M1-M10), the multicast service operable to deliver multicast content from a multicast source (page 3, 50th paragraph – a multicast source (MCS) is coupled to the GGSN and delivers for instance various multicast services such as streaming video and audio);

determining a cell supporting a user device associated with the subscriber (Fig. 1, M1-M3 coupled to RAN1);

initiating creating of a bearer path for the multicast service (page 4, 81st paragraph – SGSN informs the RAN that mobile station is joining the multicast group, so that the proper radio access bearer can be set up for the given multicast session); and

Toth does not disclose directing an enabler mobile to facilitate delivery of the multicast content to the user device using the bearer path, the enabler mobile located in the cell, the enabler mobile is distinct from a base station. Maes discloses a virtual mobile service provider 100 (Fig. 2) having a plurality of enabler devices 302 and 304 (Fig. 3) for facilitating delivery of multicast content from a plurality of content provider 108, 110, and 112 (Fig. 2) to a plurality of user devices 208, 210, and 212 (Fig. 2) via established paths (Fig. 2). In some instances, the driver may adapt the communication to the format supported by an enabler located in the access provider's network (page 5, 42nd paragraph. Herein, the enabler is located within the access provider's network or in other words, it is located in a cell of the access provider's network). Further, as illustrated in Fig. 2, the VMSP connects to the wireless network or access provider 202. The wireless network or access provider 202 can be a CDMA, GSM, GPRS, or other networks (page 3, 24th paragraph. GPRS network, as is known in the art, comprises a plurality of base stations for communicating information to devices. Therefore, the wireless enabler, herein, is distinct from the base stations of the GPRS network). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the virtual mobile service provider in Toth's system, as suggested by Maes, to deliver content to a plurality of user devices according to different formats thereby providing and allowing a virtual aggregation of

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mobile enablers, supporting functions, drivers and signaling that can be performed across different access networks.

With respect to claims 2, 7, 12, and 44, Toth discloses determining an enabler mobile corresponding to the cell supporting the user device; and instructing the enabler mobile to initiate creation of a radio access bearer (page 4, 81st paragraph – SGSN informs the RAN that mobile station is joining the multicast group, so that the proper radio access bearer can be set up for the given multicast session. Herein, RAN is already determined as the RAN serving the mobile station).

With respect to claims 3, 8, 13, 30, 35, 40, and 44, Toth discloses communicating one or more parameters associated with the bearer path to the user device, the user device operable to use the parameters to receive the multicast content (page 4, 87th paragraph – SGSN notifies the mobile station of the radio access bearer and quality of service defined for the multicast session).

With respect to claims 4, 9, 14, 31, 36, and 41, Toth discloses establishing a multicast service level of the multicast service in accordance with the cell supporting the user device (page 4, 78th paragraph – GGSN decide the quality of service to use for the distribution of the multicast group based on information from the source, operator settings and/or the mobile terminal).

With respect to claims 16, 18, and 20, Toth discloses a method for providing a multicast service, comprising:

receiving an instruction to create a radio access bearer for a multicast service and creating radio access bearer for the multicast service in response to the instruction (page 4, 81st paragraph – SGSN informs the RAN that mobile station is joining the multicast group, so that the proper radio access bearer can be set up for the given multicast session), the multicast service operable to deliver multicast content from a multicast source (page 3, 50th paragraph – a multicast source (MCS) is coupled to the GGSN and delivers for instance various multicast services such as streaming video and audio) ;

opening a PDP context for the radio access bearer (page 4, 79th paragraph- GGSN sends a multicast context activation message to the SGSN); and

Toth does not disclose that the enabler device assigned to a cell supporting a user device; directing the enabler device to facilitate delivery of the multicast content to the user device using the radio access bearer, the enabler device located in the cell, the enabler device is distinct from a base station. Maes discloses a virtual mobile service provider 100 (Fig. 2) having a plurality of enabler devices 302 and 304 (Fig. 3) for facilitating delivery of multicast content from a plurality of content provider 108, 110, and 112 (Fig. 2) to a plurality of user devices 208, 210, and 212 (Fig. 2) via established paths (Fig. 2). In some instances, the driver may adapt the communication to the format supported by an enabler located in the access provider's network (page 5, 42nd paragraph. Herein, the enabler is located within the access provider's network or in other words, it is located in a cell of the access provider's network). Further, as illustrated in Fig. 2, the VMSP connects to the wireless network or access provider 202. The wireless network or access provider 202 can be a CDMA, GSM, GPRS, or other networks (page 3, 24th paragraph. GPRS network, as is known in the art, comprises a plurality of base stations for communicating

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information to devices. Therefore, the wireless enabler, herein, is distinct from the base stations of the GPRS network). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the virtual mobile service provider in Toth's system, as suggested by Maes, to deliver content to a plurality of user devices according to different formats thereby providing and allowing a virtual aggregation of mobile enablers, supporting functions, drivers and signaling that can be performed across different access networks.

With respect to claims 17, 19, and 21, Toth discloses communicating one or more parameters associated with the radio access bearer to an application server (page 4, 76th paragraph – mobile terminal issues a membership report message which may contain information about the desired quality of service).

With respect to claims 22, 24, and 26, Toth discloses a method for providing a multicast service, comprising:

activating at a multicast gateway support node a PDP context for a multicast service (page 4, 79th – GGSN sends a multicast context activation message to the SGSN), receiving an instruction to join a multicast tree for the multicast service and joining the multicast tree in response to the instruction (page 4, 86th paragraph – SGSN replies to the GGSN, whereby the SGSN, which including at least one processor, if not already a part, becomes a part of the multicast tree).

Toth does not disclose that the multicast service facilitated by a plurality of enabler mobiles located in one or more cells, the plurality of enabler mobiles operate to deliver multicast

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content from a multicast source, each enabler mobile of the plurality of enabler mobiles distinct from a base station. Maes discloses a virtual mobile service provider 100 (Fig. 2) having a plurality of enabler devices 302 and 304 (Fig. 3) for facilitating delivery of multicast content from a plurality of content provider 108, 110, and 112 (Fig. 2) to a plurality of user devices 208, 210, and 212 (Fig. 2) via established paths (Fig. 2). In some instances, the driver may adapt the communication to the format supported by an enabler located in the access provider's network (page 5, 42nd paragraph. Herein, the enabler is located within the access provider's network or in other words, it is located in a cell of the access provider's network). Further, as illustrated in Fig. 2, the VMSP connects to the wireless network or access provider 202. The wireless network or access provider 202 can be a CDMA, GSM, GPRS, or other networks (page 3, 24th paragraph. GPRS network, as is known in the art, comprises a plurality of base stations for communicating information to devices. Therefore, the wireless enabler, herein, is distinct from the base stations of the GPRS network). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the virtual mobile service provider in Toth's system, as suggested by Maes, to deliver content to a plurality of user devices according to different formats thereby providing and allowing a virtual aggregation of mobile enablers, supporting functions, drivers and signaling that can be performed across different access networks.

With respect to claims 23, 25, 27, 32, 37, 42, and 44, Toth discloses receiving the multicast content communicated using a plurality of data packets (Fig. 1, SGSN1 and SGSN 2 receiving GTPT7 and GTPT8); and duplicating the data packets to create duplicated data packets

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for each enabler mobile of the plurality of enabler mobiles (Fig. 1, SGSN duplicates GTP7 for RAN 1 and RAN3).

With respect to claims 29, 34, 39, and 44, Toth discloses activating at a multicast gateway support node a PDP context for the multicast service (page 4, 79th – GGSN sends a multicast context activation message to the SGSN); and joining the multicast gateway support node to a multicast tree for the multicast service (page 4, 86th paragraph – SGSN replies to the GGSN, whereby the SGSN, which including at least one processor, if not already a part, becomes a part of the multicast tree).

3. Claims 5, 10, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toth et al (US Pub 2005/0053068 A1) and Maes (US Pub 2004/0266388 A1) in view of Rodriguez Gil, R. et al (WO 03/039024 A2). Hereinafter, referred to as Toth, Maes, and Rodriguez Gil.

With respect to claims 5, 10, and 15, Toth and Maes have addressed all limitations as recited in independent claims 1, 6, and 11. Toth does not disclose determining a signal power; calculating power control information from the signal power; and initiating adjustment of the signal power according to the power control information. Rodriguez Gil discloses determining a signal power; calculating power control information from the signal power; and initiating adjustment of the signal power according to the power control information (Fig. 3, quality level is determined whether greater than level max or lesser than level min, if yes, then, power out is adjusted). It would have been obvious to one having ordinary skill in the art at the time the

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invention was made to include the feature of adjusting the power level in Toth's system, as suggested by Rodriguez Gil, to increase quality of service.

Response to Arguments

4. Applicant's arguments filed July 17, 2006 have been fully considered but they are not persuasive.

Applicant argues in pages 14 and 15 that Toth and Maes combination fails to disclose, teach or suggest "directing an enabler mobile to facilitate delivery of the multicast content to the user device using the bearer path, the **enabler mobile located in the cell, the enabler mobile distinct from a base station**". Further, the RAN of Toth and the service enablers of Maes can not be properly combined because the combination would change the principle of operation of Maes's service enablers and Toth's RAN.

In the previous Office Action dated May 08, 2006, Examiner inadvertently indicated that Toth disclosed directing an enabler mobile to facilitate delivery of the multicast content to the user device using the bearer path, the enabler mobile located in the cell (page 4 of the Office Action. Wherein, RAN of Fig. 3 considered as the enabler mobile by the Examiner). Further, as indicated in page 4 of the previous Office Action, Toth did not disclose that the enabler mobile distinct from a base station.

After carefully reviewed Toth and Maes references, Examiner would like to have an opportunity to correctly point out that Toth does not disclose "directing an enabler mobile to facilitate delivery of the multicast content to the user device using the bearer path, the enabler mobile located in the cell, the enabler mobile distinct from a base station". Please see the

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rejections of claims as stated above. However, Maes discloses directing an enabler mobile to facilitate delivery of the multicast content to the user device using the bearer path, the enabler mobile located in the cell, the enabler mobile distinct from a base station. Maes discloses a virtual mobile service provider 100 (Fig. 2) having a plurality of enabler devices 302 and 304 (Fig. 3) for facilitating delivery of multicast content from a plurality of content provider 108, 110, and 112 (Fig. 2) to a plurality of user devices 208, 210, and 212 (Fig. 2) via established paths (Fig. 2). In some instances, the driver may adapt the communication to the format supported by an enabler located in the access provider's network (page 5, 42nd paragraph. Herein, the enabler is located within the access provider's network or in other words, it is located in a cell of the access provider's network. The network can have one or more cells). Further, as illustrated in Fig. 2, the VMSP comprising enabler devices connects to the wireless network or access provider 202. The wireless network or access provider 202 can be a CDMA, GSM, GPRS, or other networks (page 3, 24th paragraph. GPRS network, as is known in the art, includes a plurality of base stations for communicating information to devices. Therefore, the wireless enabler, herein, is distinct from the base stations of the GPRS network). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the enabler devices located in a network which distinct from base stations in Toth's system, as suggested by Maes, to deliver content to a plurality of user devices according to different formats thereby providing and allowing a virtual aggregation of mobile enablers, supporting functions, drivers and signaling that can be performed across different access networks. This Office Action is made final due to same prior art applied to the rejected claims.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

avl


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SUPERVISORY PATENT EXAMINER 9/25/06